

REBUTTAL TESTIMONY

of

Christopher Boggs

Rates Department

Financial Analysis Division

Illinois Commerce Commission

Illinois-American Water Company

Proposed general increase in water and sewer rates

Docket No. 16-0093

July 12, 2016

1 **Q. Please state your name and business address.**

2 A. My name is Christopher Boggs, and my business address is 527 E.
3 Capitol Avenue, Springfield, Illinois 62701.

4

5 **Q. Are you the same Mr. Boggs who previously filed direct testimony in**
6 **this proceeding?**

7 A. Yes, I am.

8

9 **Q. What issues do you address in your rebuttal testimony?**

10 A. I respond to certain issues raised by Attorney General (“AG”) witness Mr.
11 Scott Rubin; Illinois Industrial Water Consumers (“IIWC”) and Federal
12 Executive Agencies (“FEA”) witness Mr. Brian C. Collins; and Illinois
13 American Water Company (“IAWC” or “Company”) witnesses Mr. Paul
14 Herbert and Mr. Jeffrey Kaiser.

15

16 **Q. Are you sponsoring any schedules or attachments with your**
17 **testimony?**

18 A. No, I am not.

19

20 **I. Response to AG witness Rubin**

21 **Q. Have you reviewed the direct testimony of AG witness Scott Rubin?**

22 A. Yes, I have.

23

24 **Q. Does Mr. Rubin take issue with any of IAWC's rate design and cost of**
25 **service testimony and exhibits?**

26 A. Yes, he does.

27

28 **Q. What is the first issue Mr. Rubin raises with IAWC's rate design and**
29 **cost of service testimony and exhibits?**

30 A. Mr. Rubin argues that the Company improperly concluded that 8-inch
31 mains do not serve any customers in the large industrial, competitive
32 industrial, large other public authority, sales for resale, and large sales for
33 resale classes. (AG Ex. 2.0, 3, 5-7.) Instead, Mr. Rubin concluded that 11
34 of the 34 customers in these classes are, in fact, served in part by 8-inch
35 mains and that a recalculation of the COS study should be completed to
36 decrease the costs allocated to the Residential, Commercial, Industrial
37 and Other Public Authority classes and to increase costs allocated to the
38 Competitive, Large Commercial and Other Water Utility customer classes.
39 Id. at 3-7.

40

41 **Q. How did the Company respond to Mr. Rubin's recommendation**
42 **regarding 8-inch main cost allocation?**

43 A. Mr. Herbert agreed in-part with Mr. Rubin's recommendation. Mr. Herbert
44 reviewed the maps of each of the 8-inch main connections that Mr. Rubin
45 discussed in his testimony. Mr. Herbert determined that six of the 11
46 customers in the group that Mr. Rubin questions are served by distribution
47 mains that have only a very short stub main that is 8-inches or less and
48 that these stub mains come off the transmission mains before a service
49 line is connected. These stub mains function as an extension of the
50 service line because no other customers are connected to them. (IAWC
51 Ex. 11.00R, 11.) Thus, Mr. Herbert opined, these six customers should
52 not be considered connected to distribution mains. The remaining five of
53 the 11 customers, Mr. Herbert agrees, are served from a distribution main
54 and he has added back the consumption for those five customers for
55 purposes of his revised Allocation Factor 4¹. Id.

56

57 **Q. What is your assessment of Mr. Rubin's conclusions and Mr.**
58 **Herbert's response?**

59 A. Mr. Herbert's response and resulting action of modifying the COS study to
60 remedy the cost allocations for the remaining five customers seems

¹ Factor 4 is a cost allocator associated with serving base and maximum hour extra capacity functions.

reasonable. Therefore, I have no objection to the resulting COS allocations (Factor 4) reflected by Mr. Herbert's response to Mr. Rubin's conclusions.

Q. What do you recommend to the Commission regarding Mr. Rubin's COS issues for 8-inch main cost allocation?

A. I recommend the Commission approve the modifications Mr. Herbert made to his COS study and 8-inch main cost allocations as described in his rebuttal testimony and reflected in IAWC Exhibit 11.01R.

Q. What is the second issue that Mr. Rubin raised with IAWC's rate design and cost of service testimony and exhibits?

A. Mr. Rubin recommends that collections expenses and uncollectible accounts expenses should not be included in the calculation of the customer charge. (AG Ex. 2.0, 4, 8-9.) Mr. Rubin claims that collection expenses and uncollectible accounts expenses totaling \$6,737,686 in Zone 1 are not solely a function of the number of customers, but also are affected by the total amount of customers' bills. Mr. Rubin claims the total amount of bills is primarily affected by the amount of water a customer uses. When Mr. Rubin removes these expenses from the Customer Charge calculation, he concludes that the customer-related costs for a

Zone 1 customer with a 5/8" meter becomes \$18.52 under the Company's proposed revenue requirement. Therefore, Mr. Rubin recommends the Customer Charge be set at \$18.50 for a 5/8" meter. Id.

Q. How did the Company respond to Mr. Rubin's Customer Charge calculation and resulting recommendation?

A. Mr. Herbert indicates that Customer Records and Collection Labor expense includes the salaries and wages associated with maintaining customer records, accounting for the billing of customers, collecting and recording customer payments, and providing customer service and information. Contrary to what Mr. Rubin claims, these activities do not vary with the size or usage of individual customers, but rather with the total number of customers. (IAWC Ex. 11.00R, p. 10.)

Additionally, Mr. Herbert explains that it takes the same effort to account for and collect a bill whether it is for \$50, \$500, or \$5,000. Mr. Herbert further states that Mr. Rubin has not provided any evidence that these costs vary with customer usage or the amount of the bill. Id. Mr. Herbert concludes that, although a portion of the uncollectible accounts expense is related to the cost of water on the uncollected bill, he believes that the recovery of the uncollectable accounts expense should continue to be on a per-customer basis.

103

104 **Q. What is your assessment of Mr. Rubin's recommendation that**
105 **collections expenses and uncollectible accounts expenses no longer**
106 **be recovered through the Customer Charge and of Mr. Herbert's**
107 **response to Mr. Rubin's recommendation?**

108 A. I disagree with Mr. Rubin's recommendation that the collections expenses
109 and uncollectible accounts expenses no longer be recovered through the
110 Customer Charge. I agree with Mr. Herbert's assessment that Mr. Rubin
111 has not provided any evidence that the uncollectible accounts expenses
112 vary with usage or the amount of the bill. Id. If the collection efforts and
113 expenses to the Company are the same regardless of the size of the
114 amount of the delinquency, it does not seem fair to have high-volume
115 users pay a larger portion of the uncollectible accounts expense than a
116 low-volume customer. Uncollectible accounts expense should be
117 recovered on a per-customer basis through the Customer Charge.

118

119 **Q. What do you recommend to the Commission regarding Mr. Rubin's**
120 **proposal that the collections expenses and uncollectible accounts**
121 **expenses not be collected through the Customer Charge?**

122 A. I recommend that the Commission reject Mr. Rubin's proposal and instead
123 approve the Company's rate design proposal that includes collecting these

expenses through the Customer Charge. All customers should share equally in the recovery of these expenses. Requiring higher volume users to contribute more to the recovery of collections expenses and uncollectible accounts expenses would not reflect cost causation and would be unfair to high volume users.

Q. What is the third issue that Mr. Rubin raised with IAWC's rate design or cost of service testimony and exhibits?

A. Mr. Rubin recommends limiting the increase for each customer class so that no class receives a percentage increase that is more than 1.5 times the system average percentage increase or less than 0.5 times the system average increase. (AG Ex. 2.0, 4, 11.)

Q. How did the Company respond to Mr. Rubin's proposal to limit the increase for each customer class?

A. Mr. Herbert mostly agrees that the 0.5-1.5 increase limitation is reasonable. However, Mr. Herbert explains that the rates for Large Commercial, Competitive Industrial and Large Other Utility are set by contract so the increase limitations proposed by Mr. Rubin would not or could not apply to these customer classes. He also opines that adhering

144 to certain revenue targets for non-residential customers can be difficult.

145 (IAWC Ex. 11.00R, 12.)

146

147 **Q. What is your assessment of Mr. Rubin's recommendation to limit the**
148 **increase for each customer class and Mr. Herbert's response to Mr.**
149 **Rubin's proposal?**

150 A. I support Mr. Rubin's recommendations to limit the increase for each
151 customer class, with the exception of the customer classes whose rates
152 are set by contract. These limits should promote gradualism in rate
153 increases and mitigate any potential for increases that could become
154 burdensome to specific rate classes.

155

156 **Q. What do you recommend to the Commission regarding Mr. Rubin's**
157 **proposal to limit the increase for each customer class?**

158 A. I recommend that the Commission approve Mr. Rubin's proposal to limit
159 the increase for each class whose customers are not bound by the terms
160 of a contract that sets the rates for that respective class.

161

162 **II. Response to IIRC/FEA witness Collins**

163 **Q. Have you reviewed the direct testimony of IIWC/FEA witness Brian**
164 **Collins?**

165 A. Yes, I have.

166

167 **Q. Does Mr. Collins take issue with any of IAWC's rate design and cost**
168 **of service testimony and exhibits?**

169 A. Yes, he does.

170

171 **Q. What is the first issue Mr. Collins raises with IAWC's rate design or**
172 **cost of service testimony and exhibits?**

173 A. Mr. Collins opines that the Company has omitted from the COS study a
174 customer in the Large Industrial Class, who should be included in the COS
175 study. (IIWC/FEA Ex. 1.0, 7.)

176

177 **Q. How did the Company respond to Mr. Collins' proposal to include a**
178 **certain customer in the Large Industrial COS study?**

179 A. Mr. Herbert explained that he and IAWC witness Richard Kerckhove
180 agree, in part, that a reduced level of usage for this customer should be
181 included in the Large Industrial class COS study. (IAWC Ex. 4.00R, 21-
182 22.) IAWC agrees with adding this customer into the COS study because

the customer is still operating and receiving service from the Company, although at a reduced usage level. (IAWC Ex. 11.00R, 6-7.) Mr. Herbert has amended the COS studies for Zone 1 and Zone 1-ALT to reflect the most recent 12-month usage level, revenues and associated power and chemicals for the customer in the Large Industrial Class. Id.

Q. What is your assessment of Mr. Collins' recommendation to include a certain customer in the Large Industrial COS study and IAWC's response to Mr. Collins' recommendation?

A. I do not object to the Company's amended COS study that reflects the usage, revenues and associated power and chemicals for the customer in the Large Industrial Class. The Company (IAWC Ex. 4.00, 22.) and Mr. Collins (IIWC/FEA Ex. 1.0, 7.) have acknowledged a reduced usage and associated production costs for this customer. The Company's amended COS study, which reflects the most recent 12-month usage level for the customer absent any more relevant data, seems reasonable.

Q. What do you recommend to the Commission regarding Mr. Collins' proposal to include a certain customer in the Large Industrial COS study?

203 A. I recommend that the Commission approve the COS study amended by
204 the Company that reflects the most recent 12-month usage data level and
205 associated production costs for the customer in question. These changes
206 should increase the accuracy of the allocations among the classes in the
207 modified COS study.

208

209 **Q. What is the second issue Mr. Collins raises with IAWC's rate design**
210 **and cost of service testimony and exhibits?**

211 A. Mr. Collins is concerned that the Company's proposed demand factors are
212 flawed and used inappropriately in the COS study. Mr. Collins contends
213 the Company has excluded a large industrial user and an entire rate class
214 from the COS study and has also understated usage for its Residential
215 and Commercial classes in the COS study. As the result of these
216 perceived short-comings, Mr. Collins recommends using the existing
217 demand factors that were approved in the Company's last rate case
218 (Docket No. 11-0767) for Zone 1. (IIWC/FEA Ex. 1.0, 15.)

219

220 **Q. How did the Company respond to Mr. Collins' proposal to use**
221 **demand factors from the Demand Study approved in the Company's**
222 **last rate case?**

223 A. Mr. Herbert states that the demand study that IAWC conducted in
224 preparation for this case is the result of collecting direct measurement
225 data over the most recent 5-year period. (IAWC Ex. 11.00R, 3.) Mr.
226 Herbert also indicates that the demand factors used in Docket No. 11-
227 0767 included very little direct measurement data, all of which is now stale
228 because that study reflected data leading up to the filing of the rate case in
229 2011. Id.

230

231 **Q. What is your assessment of Mr. Collins' recommendation and**
232 **IAWC's response to use demand factors from the Demand Study**
233 **approved in the Company's last rate case?**

234 A. I am not persuaded by his analysis and I disagree with his
235 recommendation. Mr. Collins does not provide a convincing argument for
236 his recommendation to use outdated and stale demand data when more
237 recent, direct, and comprehensive data is available.

238

239 **Q. What do you recommend to the Commission regarding Mr. Collins'**
240 **proposal to use demand factors from the Demand Study approved in**
241 **the Company's last rate case?**

242 A. I recommend that the Commission approve the Company's Demand Study
243 data as provided at the outset of this rate case. Using current data should

244 better reflect current demand than will using data that was collected for a
245 study conducted over five years ago.

246

247 **Q. What is the third issue Mr. Collins raises with IAWC's rate design and**
248 **cost of service testimony and exhibits?**

249 A. Mr. Collins asserts that the Company's COS study used Factor 6² to
250 allocate all of the costs associated with pumping water, with the exception
251 of purchased power cost. Mr. Herbert instead has chosen to allocate
252 purchased power cost using Factor 1³. (IIWC/FEA Ex. 1.0, 16.) Mr.
253 Collins believes that Mr. Herbert's allocation of costs associated with
254 purchased power is inconsistent with the treatment of other expenses and
255 rate base associated with pumping water. Mr. Collins contends that, as a
256 result of this, the other costs (both expenses and capital) associated with
257 pumping water have been recognized by the Company to have both a
258 base component as well as an extra capacity component and have been
259 allocated appropriately on Factor 6. Id.

260

261 **Q. How did the Company respond to Mr. Collins' proposal to allocate**
262 **purchased power costs using a Factor 6 allocator instead of a Factor**
263 **1 allocator?**

² Factor 6 is a cost allocator associated with power and pumping facilities.

³ Factor 1 is a cost allocator associated with costs that vary with the amount of water consumed.

264 A. Mr. Herbert explains that, while using Factor 6 as an allocator for capital
265 costs and operating and maintenance costs associated with pumping
266 equipment is appropriate, using Factor 6 as an allocator for the power
267 costs associated with pumping is not. (IAWC Ex. 11.00R, 6-7.) He states
268 that Factor 6, which uses average flow and maximum day and hour
269 requirements, aligns with the purposes of the pumping system because
270 the pumping system is design to meet average demand as well as
271 maximum day and maximum hour demands. Id. Mr. Herbert concludes
272 that because the power to run the pumps varies with the amount of water
273 being pumped, it only varies minimally at peak usage. Therefore he
274 submits that Factor 1 is appropriate in his COS study because it is based
275 on average daily usage. Id. at 7.

276 Further, Mr. Herbert supports his allocation method for the power to run
277 the pumps by quoting the AWWA Manual M1:

278 “the demand portion of power costs should be allocated to extra
279 capacity to the degree that it varies with the demand pumping
280 requirements.”⁴

281 He explains that the AWWA Manual M1 does not suggest that the total
282 demand portion of power costs should be allocated to extra capacity, only
283 to the degree that it varies with pumping requirements. Id.

284 Finally, Mr. Herbert states that he has analyzed the Company’s power bills
285 and they show that the difference between the minimum demand charge

⁴ American Water Works Association, AWWA Manual M1, 2000, p. 54.

for the lowest demand month and the demand charges in the remaining months results in approximately 1.25% of the total purchased power expense being attributable to extra demand. He claims that, on the other hand, using Mr. Collins' Factor 6 proposal would allocate about 42.6% of power costs to the extra demand functions. An accurate refinement to the Company's COS study based on the power bill analysis would allocate only 1.25% of purchased power costs to the extra capacity function. Id. Mr. Herbert concludes that such a small refinement (1.25%) would have such an insignificant impact on the COS study, he recommends not making such an adjustment. Id. at 8.

Q. What is your assessment of Mr. Collins' recommendation to use Factor 6 to allocate purchased power instead of Factor 1 and IAWC's response to Mr. Collin's recommendation?

A. Mr. Herbert adequately justifies his use of Factor 1 to allocate purchased power costs instead of Factor 6 as Mr. Collins recommends. The AWWA Manual M1's procedures are commonly used in COS studies and rate designs and Mr. Herbert followed the suggested procedure when he allocated purchased power costs. Additionally, there is a large disparity in the total purchased power expense being attributable to extra demand between Mr. Collins' recommendation and the suggested procedures set forth in the AWWA Manual M1.

308

309 **Q. What do you recommend to the Commission regarding Mr. Collins'**
310 **proposal to use Factor 6 to allocate purchased power instead of**
311 **Factor 1?**

312 A. I recommend that the Commission reject Mr. Collins' proposal to use
313 Factor 6 to allocate purchased power instead of Factor 1. The allocation
314 factors and procedures the Company used were approved in the
315 Company's last case, the Company conformed to the procedures in the
316 AWWA Manual M1, and Mr. Collins did not provide convincing reasons or
317 data that would justify the need to deviate from the previously approved
318 process.

319

320 **Q. What is the fourth issue Mr. Collins raises with IAWC's rate design**
321 **and cost of service testimony and exhibits?**

322 A. Mr. Collins suggests that the Metered Large User Water Service tariff be
323 simplified by eliminating the rate formula in the tariff which includes the
324 customer's maximum day demand factor as a variable. (IIWC/FEA Ex. 1.0,
325 18.) Mr. Collins also recommends that the rate be based on the utility's
326 cost of providing service to the two customers served under this tariff. Id.

327

328 **Q. How did the Company respond to Mr. Collins' proposal to simplify**
329 **the Metered Large Water Service tariff?**

330 A. Mr. Herbert responded by stating Mr. Collins' proposal will not simplify the
331 tariff or the rate charged under the tariff and that Mr. Collins' proposal
332 needs more clarity. (IAWC Ex. 11.00R, 8.) Mr. Herbert explained that Mr.
333 Collins did not provide any description or calculation of how IAWC would
334 charge customers under his proposal and that Mr. Collins has not
335 provided a specific rate design but instead proposes that a specific cost-
336 based rate design be developed cooperatively by IAWC and IIWC/FEA.
337 Id.

338

339 **Q. What is your assessment of Mr. Collins' recommendation and**
340 **IAWC's response to simplify the Metered Large Water Service tariff?**

341 A. Mr. Collins did not provide a specific proposal regarding eliminating the
342 rate formula in the Metered Large Water Service tariff. Rather, he simply
343 indicated the rate should be based on the cost of providing service to
344 customers. Without a specific rate design for these customers, it is
345 difficult to assess the merits of Mr. Collins' proposal.

346

347 **Q. What do you recommend to the Commission regarding Mr. Collins'**
348 **proposal to simplify the Metered Large Water Service tariff?**

349 A. If Mr. Collins can provide a specific rate design that can recover the cost
350 to serve these customers, Staff, the Company and any other intervenors
351 could evaluate the merits of Mr. Collins' proposal. Until then, there is not
352 enough data or information to justify approving his proposal so I
353 recommend that the Commission reject Mr. Collins' proposal to simplify
354 the Metered Large Water Service tariff.

355

356 **III. Response to IAWC witnesses Herbert and Kaiser**

357 **Q. Have you reviewed the rebuttal testimonies of IAWC witnesses Mr.**
358 **Herbert and Mr. Kaiser?**

359 A. Yes, I have.

360

361 **Q. Did Mr. Herbert accept the recommendations that you made in your**
362 **direct testimony regarding a declining block usage charge for non-**
363 **residential customers in the Chicago Metro Sewer District?**

364 A. Yes. Mr. Herbert indicates he does not oppose this recommendation.
365 (IAWC Ex. 11.00R, 5.)

366

367 **Q. Did Mr. Herbert accept your recommendation that IAWC set public**
368 **fire charges equal to the cost of serving public fire customers?**

369 A. Yes. Again, Mr. Herbert indicates the Company will not oppose my
370 recommendation. Id.

371

372 **Q. Did Mr. Herbert accept your recommendation that IAWC conduct**
373 **demand studies every ten years?**

374 A. Yes. Mr. Herbert indicates the Company accepts my recommendation
375 that the Company conduct a demand study every ten years so long as the
376 demand study utilizes the AWWA method in conducting the demand study
377 instead of the direct measurement method used in the demand study in
378 the filing of this proceeding. He also agrees the Company will submit
379 evidence in subsequent rate cases prior to the expiration of this demand
380 study, to demonstrate whether there has been a significant and continual
381 change in the overall system maximum day ratio since the date of the
382 current demand study. Id. at 3-4.

383

384 **Q. How do you respond to Mr. Herbert's recommendation to conduct a**
385 **demand study every ten years using the AWWA method instead of**
386 **the direct measurement method that you proposed in your direct**
387 **testimony?**

388 A. I do not object to Mr. Herbert's proposal. After reviewing the rebuttal
389 testimony of Company witness Mr. Jeffrey Kaiser and the direct testimony

of the AG witness Mr. Rubin, who agrees with the Company that demand study data should cease to be collected due to cost considerations and that the current demand data should be useful for many years (AG Ex. 2.0, 16.), I conclude that the cost to collect and monitor the data multiple times through the year and then to subsequently analyze the data is not cost effective for the ratepayers who must ultimately pay the costs for these procedures. Mr. Kaiser also indicates that the AWWA methodology is the industry standard, would be much less expensive than a direct measurement demand study, and would incorporate data from multiple years allowing IAWC to capture the peak usage periods necessary to develop accurate demand factors.

Q. What is your recommendation regarding the methodology to be used for future demand studies?

A. I recommend the Commission approve Mr. Herbert and Mr. Kaiser's proposal to utilize the AWWA method to conduct the demand study when the current study data expires in 2026. Because the AWWA method is more cost effective, I have no objections to using the AWWA method. However, if the time comes that technology provides a more efficient and less costly method to collect direct measurement data such as through smart meters, I recommend that the methodology be revisited to ensure that the most comprehensive data collection procedures are being utilized.

412

413 **Q.** **Does this conclude your rebuttal testimony?**

414 **A.** Yes, it does.